File Copy
09/955,462

DIALOG

Set	Items	Description
S1	67	MAMMALIAN (N10) (CYTOPLASMIC(W)EXTRACT?)
S2	812	MAMMALIAN (N10) (CELL(W)EXTRACT?)
S3	872	S1 OR S2
S4	0	S3 (S)((METHYLATED(W)(CAP OR CAPS)) OR (METHYLATED(W)CAP(W-)ANALOG?))
S5	184	((METHYLATED(W)(CAP OR CAPS)) OR (METHYLATED(W)CAP(W)ANALOG?))
S6	15	(DECAP OR DECAPPING)(W)(MRNA? OR RNA?)
S7	471	(DECAP OR DECAPPING)(N7)(MRNA? OR RNA?)
S8	74	((CAP OR CAPS)(N7)(MRNA? OR RNA?))(N5)(REMOVED OR REMOVE OR REMOVAL)
S9	54	(S6 OR S7 OR S8)(N10)(IN(W)VITRO)
S10	12	S9 (S) (MAMMALIAN OR MAMMAL?)
S11	5	RD S10 (unique items)

?

11/3/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

13800941 BIOSIS NO.: 200200429762
Analysis of the products of mRNA decapping and 3'-to-5' decay by denaturing gel electrophoresis.
AUTHOR: Bergman Naomi; Opyrchal Mateusz; Bates Elizabeth J; Wilusz Jeffrey (a)
AUTHOR ADDRESS: (a)Department of Microbiology and Molecular Genetics, International Center for Public Health, University of Medicine and Dentistry of New Jersey-New Jersey Medical School, 225 Warren Street, Newark, NJ, 07103**USA E-Mail: wilusz@umdnj.edu
JOURNAL: RNA (New York) 8 (7):p959-965 July, 2002
MEDIUM: print
ISSN: 1355-8382
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

11/3/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12991268 BIOSIS NO.: 200100198417
A novel mRNA-decapping activity in HeLa cytoplasmic extracts is regulated by AU-rich elements.
AUTHOR: Gao Min; Wilusz Carol J; Peltz Stuart W; Wilusz Jeffrey(a)
AUTHOR ADDRESS: (a)Department of Microbiology and Molecular Genetics, UMDNJ-New Jersey Medical School, Newark, NJ, 07103: wilusz@umdnj.edu**USA
JOURNAL: EMBO (European Molecular Biology Organization) Journal 20 (5):p1134-1143 March 1, 2001
MEDIUM: print
ISSN: 0261-4189
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

not on patent

11/3/3 (Item 1 from file: 71)
DIALOG(R)File 71:ELSEVIER BIOBASE

02087451 2002167185
Analysis of the products of mRNA decapping and 3prime-to-5prime decay by denaturing gel electrophoresis
Bergman N.; Opyrchal M.; Bates E.J.; Wilusz J.
ADDRESS: J. Wilusz, Univ. of Med./Dent. of New Jersey, Department of Microbiology, Intl. Center for Public Health, 225 Warren Street, Newark, NJ 07103, United States
EMAIL: wilusz@umdnj.edu
Journal: RNA, 8/7 (959-965), 2002, United States
CODEN: RNARF
ISSN: 1355-8382
DOCUMENT TYPE: Article
LANGUAGES: English SUMMARY LANGUAGES: English
NO. OF REFERENCES: 46

DESCRIPTORS:
Decapping; Exonucleolytic decay; Exosome; mRNA stability

CLASSIFICATION CODE AND DESCRIPTION:
99 - General

11/3/4 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

137321275 CA: 137(22)321275m PATENT
In vitro system for reproducing mammalian messenger RNA decapping and methods for the screening of decapping modulators and identifying decapping enzymes
INVENTOR(AUTHOR): Wilusz, Jeffrey; Wilusz, Carol; Gao, Min
LOCATION: USA
PATENT: U.S. Pat. Appl. Publ. ; US 20020150913 A1 DATE: 20021017
APPLICATION: US 955462 (20010918) *US PV233682 (20000919)
PAGES: 27 pp. CODEN: USXXCO LANGUAGE: English CLASS: 435006000; C12Q-001/68A; C12N-005/06B

11/3/5 (Item 1 from file: 266)
DIALOG(R)File 266:FEDRIP

00333524
IDENTIFYING NO.: 1R01GM63832-01 AGENCY CODE: CRISP
Regulation of mRNA Decapping in Human Cells
PRINCIPAL INVESTIGATOR: WILUSZ, JEFFREY
ADDRESS: UMDNJ NEW JERSEY MED SCHOOL 185 SOUTH ORANGE AVE, MSB F607 NEWARK, NJ 07103-2714
PERFORMING ORG.: UNIV OF MED/DENT NJ NEWARK, NEWARK, NEW JERSEY
SPONSORING ORG.: NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES
FY : 2001
? t s11/k/1-5
>>>KWIC option is not available in file(s): 399

11/K/1 (Item 1 from file: 5)
DIALOG(R)File 5:(c) 2002 BIOSIS. All rts. reserv.

...ABSTRACT: to-3' decay or exosome-mediated 3'-to-5' exonucleolytic decay. Current assays to assess **mRNA decapping in vitro** using cap-labeled **RNA** substrates rely on one-dimensional thin layer chromatography. This approach does not, however, resolve free...

...one-step assay to quantitatively assess the contributions of the exosome and DCP-1-type **decapping** on turnover of an **RNA** substrate **in vitro**. We have applied this assay to recalculate the effect of competition of cap-binding proteins...

...addition, we have used the assay to confirm observations made on regulated mRNA decapping in **mammalian** extracts that contain much higher levels of exosome activity than yeast extracts.

11/K/2 (Item 2 from file: 5)
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...ABSTRACT: a major role in mRNA turnover in yeast, biochemical evidence for a similar activity in **mammalian** cells has been elusive. We have now identified a decapping activity in HeLa cytoplasmic extracts...

...DAN/PARN. Similar to in vivo observations, the presence of a poly(A) tail represses **decapping** of **RNAs in vitro** in a poly(A)-binding protein-dependent fashion. AU-rich elements (AREs), which

act as regulators of **mRNA** stability in vivo, are potent stimulators of **decapping in vitro**. The stimulation of decapping by AREs requires sequence-specific ARE-binding proteins. These data suggest that cap recognition and decapping play key roles in mediating mRNA turnover in **mammalian** cells.

11/K/3 (Item 1 from file: 71)
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...to-3prime decay or exosome-mediated 3prime-to-5prime exonucleolytic decay. Current assays to assess **mRNA decapping in vitro** using cap-labeled **RNA** substrates rely on one-dimensional thin layer chromatography. This approach does not, however, resolve free...

...one-step assay to quantitatively assess the contributions of the exosome and DCP-1-type **decapping** on turnover of an **RNA** substrate **in vitro**. We have applied this assay to recalculate the effect of competition of cap-binding proteins...

...addition, we have used the assay to confirm observations made on regulated mRNA decapping in **mammalian** extracts that contain much higher levels of exosome activity than yeast extracts.

11/K/5 (Item 1 from file: 266)
DIALOG(R)File 266:Comp & dist by NTIS, Intl Copyright All Rights Res. All rts. reserv.

...SUMMARY: mRNA turnover are, howe ver, generally unclear. We have discovered a novel enzymatic activity in **mammali** an cells that specifically removes the 5'-cap from mRNAs. Furthermore, this dec apping activity...

... independent complex, AU-rich insta bility elements, which regulate the stability of many short-lived **mRNAs** in vivo, dramatically stimulate **decapping** in our **in vitro** assays. In this application, w e will build upon these observations and investigate the underlying mechanisms t hat regulate decapping of mRNAs in **mammalian** cells. First, we propose to identi fy and characterize the novel human decapping enzyme. Second...

...ins ights into this important area of post-transcriptional regulation of gene expres sion in **mammalian** cells.
?

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